

**Method for automatically matching**  
**graphic elements and phonetic elements**

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**ABSTRACT**

The invention derives automatically segmenting any graphic chain into graphemes and any phonetic chain into phonemes from transcriptions graphic chains (words) into  
 10 phonetic chains. First probabilities ( $P(g_i|p_j)$ ) of transcriptions of graphic elements into phonetic elements are estimated (E2). For each transcription of a given graphic chain with M graphic elements into a corresponding phonetic chain with N phonetic elements,  
 15 second probabilities ( $P(g_1, \dots, g_m|p_1, \dots, p_n)$ ) of MN second transcriptions of M graphic chains successively concatenating the M graphic elements into N phonetic chains successively concatenating the N phonetic elements are determined. Links between the last elements ( $g_m, p_n$ )  
 20 of the graphic and phonetic chains of second transcriptions are established in order to constitute in an  $M \times N$  matrix a path segmenting the given graphic chain into graphemes corresponding to respective phonemes segmenting the corresponding phonetic chain.

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